

REMARKS

The Office Action rejected former Claims 1-12, 24-25, and 27-39 under 35 U.S.C. §101 as being directed towards non-statutory matter. Applicant respectfully believes that Claim 40 and its dependent Claims 41 - 58 overcome the rejection of the former claims under 35 U.S.C. §101.

The present invention is directed towards an information processing system for providing monetary incentives and ensuring royalty payments to researchers who collect and administer data pursuant to tests. (Pg. 1, lns. 7 – 11). The present invention controls and monitors environmental controlling means X, environmental measuring means Y, and state measuring means Z on a biological organism such as a plant. (Fig. 4) By controlling and monitoring environmental controlling means X, environmental measuring means Y, state measuring means Z on a biological organism such as a plant, the present invention can detect parameters that favor the culturing of particular living organisms. (Pg. 2, ln. 25 – Pg. 3, ln. 4). A third party can then inspect the state data and determine if the state data is useful. If it is, the third party can purchase the environmental data associated with the state data to allow the third party to attempt to recreate the state data. This allows a user to obtain royalty for producing valuable data which encourages users to share and provide valuable data. Thus, data which may ordinarily be held secretly can now be shared and/or disclosed. (Pg. 3, ln. 4 – 23). This improves the flow of information and will help to enhance the discovery of useful procedures for enhancing and promoting the growth of biological organisms.

The Office Action rejected Claims 1-12, 24-25, 27-30, and 33-39 under 35 U.S.C. §103(a) as being unpatentable over *Lys et al.* (U.S. 6,577,080) in view of *Wang et al.* (U.S. 6,885,748).

Lys is directed towards a pulse width modulated current control for a lighting assembly such as an LED system or LED lighting assembly. (Col. 5, Ins. 25 – 42).

With respect to Claim 40, *Lys* does not teach or suggest “an environmental data receiving part that receives relevant environmental data which is data concerning an environment of the living organism including the light irradiated on the living organism from a first controlling system” and “a state data receiving part that receives state data which is data concerning a state of a midstream process or a final result of a culture or cure of living organisms.” *Lys* discloses accelerating plant growth by controlling the spectrum of light that they are grown in. However, there is no indication that *Lys* controls the light and monitors the growth of the plants in correspondence with the specific spectrum of light. *Lys* only indicates that the light is controlled but does not seek to monitor the growth of the plants. *Lys* teaches that a farmer can grow plant with a certain wavelength of light to increase the growth of the plant over natural light, but does not teach that the farmer should also actively monitor the growth of the plant by taking scientific data of the vegetable. (Col. 62, Ins. 55 – 67) Furthermore, FIG. 92A does not appear to have any scientific equipment for measuring data of the plant.

Since the Office Action admits that *Lys* does not disclose “royalty data,” *Lys* also does not disclose “a royalty data producing part that produces royalty data which is a value to be received in return for disclosing the environmental data originally produced by the first controlling system to the second controlling system, in relationship to a controlling system in relationship to a controlling system identifier that identifies the first controlling system when the environmental data is received or delivered.” There is no indication within *Lys* that there should be any sort of mechanism to produce royalty data and more specifically royalty data which is a value to be received in return for disclosing the environmental data.

The Office Action cites to *Wang* for “yielding a royalty.” *Wang* is directed towards a method of protecting digital works. (Abstract)

As disclosed in MPEP § 2141.02(I)

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983) (Claims were directed to a vibratory testing machine (a hard-bearing wheel balancer) comprising a holding structure, a base structure, and a supporting means which form “a single integral and gaplessly continuous piece.” *Nortron* argued the invention is just making integral what had been made in four bolted pieces, improperly limiting the focus to a structural difference from the prior art and failing to consider the invention as a whole. The prior art perceived a need for mechanisms to dampen resonance, whereas the inventor eliminated the need for dampening via the one-piece gapless support structure. “Because that insight was contrary to the understandings and expectations of the art, the structure effectuating it would not have been obvious to those skilled in the art.” 713 F.2d at 785, 218 USPQ at 700 (citations omitted).).

Wang discloses “yielding a royalty” in the context of a digital document and not in the context of the present invention which is environmental data. There is no indication in *Wang* that such royalty data should be produced in return for environmental data, “which is data concerning an environment of the living organism including the light irradiated on the living organism from a first controlling system.” *Wang* only discloses that a document 112 and passes it to a distributor 114 for distribution. There is no indication that the distributor 114 should be connected to environmental control means or state measuring means. There also does not appear to be any structure disclosed which would support such features.

In contrast, in the present invention, plant culturing devices P1 is connected to controlling systems P2 and information processing systems P3. (Pg. 6, ln. 19 - Pg. 7, ln. 4). Controlling systems P2 controls and receives data from plant culturing devices P1. (Pg. 11, lns. 3 – 11, FIG. 4). When payment is received, information processing systems P3, then transmits data from controlling systems P2 to the paying party. (Pg. 13, ln. 15 – Pg. 17, ln. 25; FIG. 5).

The Office Action on Page 9 cites to the ability to distribute up to 100,000 copies of a document at a \$1.00 per copy royalty with additional copies yielding a \$2.00 royalty in *Wang* for the motivation to combine *Wang* with *Lys*. (Col. 14, ln. 67 – Col. 15, ln. 6) However, such rationale amounts to stating that royalty data should be included because of the ability to make money for distributing copies of a document, which ignores why *Lys*, a patent discussing various forms of lighting, should include royalty data. The statement in *Wang* does not discuss lights, the environment, living organisms, or any sort of scientific experiment. Furthermore, there is no indication within *Lys* that environmental data in correspondence with state data should be recorded and more specifically that the environmental data should be embodied in a document format for distribution to third parties. Such detailed documentation of environmental data would also teach away from *Lys*. *Lys* states that it is already understood that “plant growth can be accelerated by precisely controlling the spectrum of light they are grown in.” (Col. 62, lns. 56 – 58) Thus, there would be no need to document the environmental data in correspondence with the state data because it is already known what environment the plants should be in to produce a desired state of the plants. Equipment necessary to document the environmental data and the state data would also be cumbersome and require the farmer or third party to increase his costs drastically, possibly to the point of negating much of the benefits of the accelerated growth.

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994); *see KSR*, 127 S. Ct. at 1739-40 (explaining that when the prior art teaches away from a combination, that combination is more likely to be nonobvious). Additionally, a reference may teach away from a use when that use would render the result inoperable. *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1354 (Fed. Cir. 2001).

In re Icon Health and Fitness, Inc. 2007 U.S. App. Lexis 18244, *10

In contrast, the present invention deals with previously undisclosed results which may be valuable if they are now disclosed after experimentation. The royalty data would allow third parties to pay for the environmental data so they can reproduce or avoid the state data. The royalty data would also provide economic incentives for the scientists producing the environmental data and state data to continue experimentation. (Pg. 2, ln. 25 – Pg. 4, ln. 8) For example, if a plant had a disease which is potentially extremely devastating, the scientist can find a cure for the disease after hundreds if not thousands of hours of experimentation. The environmental data could disclose for example, that by raising the temperature of the plant 10 degrees for 3 hours followed by a cool down period of 2 hours over a span of two days, the disease could be eradicated. The state data of the plant could be disclosed including information about the disease and the health of the plant. A farmer or corporation could view the state data and realize that this information would be valuable to have since such a disease is deadly to his crop. The farmer could then purchase the environmental data allowing the farmer to reproduce the state data. This would allow the scientist to be rewarded for his efforts through royalty payments and the scientist would then be encouraged to continue experimentation to find cures for other diseases.

Our recent discussion with Pinchus Laufer in the Office of Patent Legal Administration, who was involved in writing the Examination Guidelines for Determining Obviousness under 35 USC §103 in view of the Supreme Court decision in *KSR International Co. vs. Teleflex, Inc.* verified that the KSR decision still required a specific rationale that could not be based on hindsight for purportedly combining the elements in the prior art to meet an invention defined in the patent claims.

Mr. Laufer incorporated the following from the existing MPEP into the Guidelines.

As noted in the MPEP at §2143.02:

A rationale to support a conclusion that a claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395 (2007); *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950). (underline added)

The combination of *Wang* with *Lys* would require *Lys* to add cumbersome and expensive equipment which may negate any economic advantage of the lighting systems disclosed in *Lys*. Likewise *Wang* does not contemplate connecting any sort of plant culturing device to its database system. *Siegel et al* (U.S. 7,112,566) and *Pelka* (U.S. 6, 177,761) also do not remedy the deficiencies of *Lys* and *Wang*.

With respect to Claim 44, *Lys* does not disclose “an assessment data obtaining part that obtains assessment data showing an assessment of uniqueness or effectiveness of the environmental data administered by the environmental data administrating part.” The Office

Action cites to a current-controlled unit which is “uniquely addressable and capable of receiving illumination color information on a computer lighting network” for the features of the present invention. The uniqueness disclosed in *Lys* is different from the “uniqueness” in the present invention. In *Lys*, the uniqueness relates to unique addressing allowing each LED to be separately controlled and not to the uniqueness of the environmental data. While it is true that *Lys* discloses the use of the word “environment,” it again does so in a different context than the present invention. (Col. 32, ln. 54; Col. 34, ln. 44). *Lys* teaches that LED unit 4000 may be provided for illumination in a variety of environments which means that LED unit 4000 may be used in many circumstances such as with tables, cars, etc. This is different from environmental data, which as noted in the claim language is “which is data concerning an environment of the living organism including the light irradiated on the living organism from a first controlling system.” Thus, the present invention relates to information regarding the light itself. With respect to the term “data,” again the Office Action cites to an instance where the term “data” appears. The term data as cited is used in the context to control how bright the light bulb should be and not concerning how bright the light bulb actually is.

With respect to Claim 45, *Lys* fails to disclose “an assessment data obtaining part that obtains the assessment data showing an assessment of an effectiveness of the environmental data administered by the environmental data administrating part, the royalty data producing part produces the royalty data based on a content of the assessment data obtained by the assessment data obtaining part.” The Office Action on Page 15 cites to Column 54, lines 52 to 61 for the features of the present invention. However, *Lys* discloses that a material could be evaluating by illuminating the material with an LED system and determining a characteristic of the reflected light. The characteristic of the reflected light is then compared with a set of known light

parameters which relates to a feature of the material. However, the method disclosed in *Lys* merely determines a characteristic of the underlying material and does not determine how effective the LED system is. *Lys* is not concerned with whether the illumination of the LED system produces a desired effect on the underlying material, but only with the characteristics of the material that are revealed by having the LED system illuminating the material.

Furthermore, while Wang discloses royalty data it does not disclose that the royalty data should be based on the effectiveness of the disclosed environmental data. Also, while *Lys* discloses that a material can be evaluated, it does not do so in the context of determining the effectiveness of the environmental data. The evaluation of the material only determines certain features of the material and not whether the environmental data is effective or not. Also there is no indication in *Lys* that the characteristics of the material should have any bearing on royalty data.

In contrast, in the present invention, the environmental data is determined to be effective or not based on an assessment test conducted to culture plants by using the environmental data and determining whether the resulting state data is generally the same as the state data associated with the environmental data. (Pg. 15, lns. 5 – 12). The value amount data setting part 311 sets value amount data showing a value amount in compensation for delivering the environmental data in accordance with a predetermined calculation formula with a parameter as the assessment value of the assessment data and the plant identifier. (Pg. 15, lns. 13 – 16)

With respect to Claim 49, *Lys* does not teach or suggest “a fundamental environmental data storing part that stores a fundamental environmental datum or data in advance.” The Office Action cites to the concepts in *Lys* that the LED unit 4000 can be provided for illumination within an environment and that light module 100 may be provided with a memory to store

instructions so that light module 100 may act in stand alone mode according to pre-programmed instructions. (Col. 11, lns. 10 – 13, Col. 32, ln. 54, Col. 34, ln. 44). The fact that the *Lys* discloses an LED unit which can operate in multiple environments and a light module that includes a memory to store instructions does not mean that the memory stores instructions about the environment in which the LED operates or for that matter, fundamental environmental data.

In contrast, in the present invention, a fundamental environmental data storing part stores fundamental environmental data. The fundamental environmental data, as shown in FIG.9 is a fundamental to producing environmental data for culturing plants in case that there is a request from each of the controlling system P2. (Pg. 17, lns. 19 – 25)

With respect to Claim 53, *Lys* and *Wang* do not teach or suggest “a living organism state measuring means that measures the state of growth or health of living organisms.” There is no indication in *Wang* that there should be any structure to measure the state of growth or health of living organisms.

Furthermore, *Lys* only discloses controlling the spectrum of light to accelerate plant growth. However, there is no indication that it measures the state of growth or health of the plant. (Col. 62, lns. 55 – 60)

In contrast, in the present invention, as seen in FIG. 18 and 19, the state measuring means Z can be an electroencephalograph, a clinical thermometer, a heart rate measuring instrument, a skin resistance meter, etc. The state measuring means Z can measure brain waves, body temperature, heart rate, skin resistance, etc. (Pg. 25, lns. 5 – 9). The state measuring means Z can also detect a cultured state of plants as seen in FIG. 4. (Pg. 7, lns. 9 – 10).

With respect to Claim 58, neither *Lys*, *Wang*, *Siegel*, or *Pelka* teach or suggest “wherein the environment controlling means further includes a temperature controlling means including a

heater or a window open-close mechanism.” There is no indication in *Lys* that the environment controlling means should including a heater or a window open-close mechanism. Since *Wang* is directed towards royalty payments, there is also no indication that it is concerned with controlling the temperature. *Siegel* is directed towards reducing EDS and improving nighttime sleep through the use of Hcrt-1 and there is no indication that it controls the temperature. *Pelka* is an apparatus to extract light from an LED and again does not control temperature.

With respect to Claim 59, neither *Lys*, *Wang*, *Siegel*, or *Pelka* disclose “means for transferring monetary value from the second controlling system to the first controlling system based on the assessment of uniqueness or effectiveness of the environmental data when the second controlling system receives environmental data originally produced by the first controlling system.”

The MPEP §2182 states that “application of a prior art reference to a means or step plus function limitation requires that the prior art element perform the identical function specified in the claim. However, if a prior art reference teaches identity of function to that specified in a claim, then...an examiner carries the initial burden of proof for showing that the prior art structure or step is the same as or equivalent to the structure, material, or acts described in the specification which has been identified as corresponding to the claimed means or step plus function.” The “means or step plus function” limitation should be interpreted in a manner consistent with the specification disclosure. See *In re Donaldson Co.*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994).

Lys does not disclose a royalty payment system nor does it suggest any system should be based on the uniqueness or effectiveness of the environmental data. *Wang* discloses a royalty

collection system but does not disclose that it should be based on the uniqueness or effectiveness of the environmental data. *Siegel* and *Pelka* also do not remedy the deficiencies of *Lys* or *Wang*.

In contrast, in the present invention, royalty data producing part 34 produces, updates or deletes the royalty data showing royalty in relationship to a controlling system identifier to identify the one controlling system P2 when the environmental data is delivered. Royalty is a value received in return for disclosing the environmental data proprietary produced by the one controlling system P2 to another controlling system P2. (Pg. 17, lns. 6 – 14) Payment data obtaining part 38 automatically obtains a payment data concerning payment of the value or guarantee of payment for the delivery from, for example, account data from financial institutions in relation to the controlling system identifier to request the environmental data. (Pg. 21, ln. 27 – Pg. 22, ln. 3) If the payment data obtaining part 38 obtains effective payment data and a content of the assessment data is “with uniqueness” and “with effectiveness”, the environmental data distributing part 33 distributes the environmental data to the another controlling system P2. (Pg. 22, ln. 4 – 12)

Furthermore, neither *Lys*, *Wang*, *Siegel*, or *Pelka* disclose “means for measuring the environment of the living organism to produce environmental data concerning the environment of the living organism including at least one of an electroencephalograph, a clinical thermometer, a heart rate measuring instrument, or a skin resistance meter.” There is no indication that *Lys* utilizes an electroencephalograph, a clinical thermometer, a heart rate measuring instrument, or a skin resistance meter, especially since *Lys* is only concerned with illuminating objects. *Wang* also does not disclose the use of an electroencephalograph, a clinical thermometer, a heart rate measuring instrument, or a skin resistance meter in producing royalty data. *Siegel* discloses the use of actigraphs and there is no indication that it utilizes an electroencephalograph, a clinical


thermometer, a heart rate measuring instrument, or a skin resistance meter in the treatment for EDS. (Col. 26, lns. 16 – 21) *Pelka* only discloses a light and not the use of an electroencephalograph, a clinical thermometer, a heart rate measuring instrument, or a skin resistance meter.

In contrast, in the present invention, the state measuring means Z can be an electroencephalograph, a clinical thermometer, a heart rate measuring instrument, a skin resistance meter, etc. The state measuring means Z can thus measure brain waves, body temperature, heart rate, skin resistance, etc. (Pg. 25, lns. 5 – 9; FIGS. 18, 19).

The application is believed in condition for allowance. If there are any questions with regards to this response, the undersigned attorney can be contacted at the listed phone number.

Very truly yours,

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